

## Connect the Dots with Tosibox



Do it Easily.  
Build and manage secure OT infrastructure in minutes



Do it Automatically.  
Connect anything, anywhere - all automated.



Do it Cybersecurely.  
You own the data and it's always encrypted.

## TOSIBOX® Lock 500

### The next generation Plug & Go™ connectivity device

TOSIBOX® Lock 500 is a high-end connectivity device bringing unprecedented possibilities for customers to manage their operations and to build new IoT solutions. The Lock 500 is ideal for demanding industrial environments and opens up new opportunities in security and office networking sectors.

The Lock 500 is compatible with all existing TOSIBOX® products. Modularity of the products enables easy and fast extension of networks.

#### Main features

##### High performance

- Massive VPN throughput for data consuming applications, end-to-end encryption between TOSIBOX® devices
- Up to 50 concurrent VPN connections

##### Reliability

- Integrated WiFi as connectivity method or access point for wireless devices on site.
- Built-in LTE modem (optional), with three modem variants covering most of the globe – no external modem needed
- Dual-SIM slots for operator redundancy allows for even more reliable connectivity
- TosiOnline™ automatic reconnection of dropped connections

##### Industrial design

- 2/2 x Digital I/O for controlling and monitoring of Lock status and sending SMS in I/O events
- Robust and fanless enclosure, integrated DIN rail bracket and industrial screw-on DC power connector

# TOSIBOX® Lock 500 Technical Data

## Product codes:

TBL5, TBL5PS, TBL5iAPS, TBL5iB, TBL5iBPS, TBL5iC, TBL5iCPS, TBL5iD, TBL5iDPS, TBL5iF, TBL5iFPS

## Ports

- 1 x USB 2.0, type A
- 1 x RJ-45 WAN connection, 10/100 Mb/s, auto-negotiation (MDI / MDI-X)
- 3 x RJ-45 LAN connection, 10/100 Mb/s, auto-negotiation (MDI / MDI-X)
- LAN3 can be assigned as Service connection, 10/100 Mb/s, auto-negotiation (MDI / MDI-X)
- Ethernet port isolation: 1500 Vrms 1 minute (when device frame connected to system ground potential)

## Connections

- 12-48V DC (+/-20%), reverse polarity protected
- Device frame connector
- 2 x WiFi antenna connector, RP-SMA Female
- (TBL5i\*) 2 x LTE antenna connectors, SMA Female
- Lower LTE connector for main antenna
- Upper LTE connector for supporting antenna
- 2 x Digital Input, 2 x Digital Output, 24V DC out
- DIN rail attachment (back)
- Maximum power consumption 10W

## Connection features

- Independent of operating systems
- Works in all Internet connections (operator independent)
- Supports HTTP proxy servers with and without authentication
- Works with dynamic, static and private IP addresses
- Management web UI access via http/https
- Modbus server
- Built-in firewall, NAT
- Up to 50 concurrent VPN connections
- Aggregate VPN throughput up to 70 Mbps
  - Single VPN throughput up to 50 Mbps

## Mobile connection features

- Supported External USB modem: TOSIBOX® 4G Modem EU (TB4GM8EU), TOSIBOX® 4G Modem AU (TB4GM2AU), Multitech MTR-LAT1 (TB4GM4)
- TosiOnline Automatic network recovery that recovers from most mobile operator and modem problems

## TBL5iB\*

- Cellular module: Sierra Wireless EM7430
- Region: APAC
- LTE Cat-6
- Up to 300 Mbps DL, 50 Mbps UL
- Frequency Bands (4G LTE): B1, B3, B5, B7, B8, B18, B19, B21, B28, B38, B39, B40, B41

## TBL5iC\*

- Cellular module: Sierra Wireless EM7455
- Region: US/CAN
- LTE Cat-6
- Up to 300 Mbps DL, 50 Mbps UL
- Frequency Bands (4G LTE): B1, B2, B3, B4, B5, B7, B12, B13, B20, B25, B26, B29, B41

## TBL5iD\*

- Cellular module: Sierra Wireless EM7511
- Region: US/CAN
- CBRS
- LTE Cat12 / carrier aggregation
- Up to 600 Mbps DL, 100 Mbps UL
- Frequency Bands (4G LTE): B1, B2, B3, B4, B7, B8, B9, B12, B13, B14, B18, B19, B20, B5, B42, B43, B26, B29, B41, B30, B66, B32, B46, B48

## TBL5iF\*

- Cellular module: Sierra Wireless EM7411
- Region: US/CAN
- LTE Cat7
- Up to 300 Mbps DL, 150 Mbps UL
- Frequency Bands (4G LTE): B2, B4, B5, B7, B12, B13, B14, B25, B26, B41, B42, B43, B48, B66, B71

## WLAN

- IEEE 802.11 b/g/n, max. 150 Mbps
- Encryptions WEP, WPA-PSK, WPA2-PSK, WPA-PSK/WPA2-PSK mixed mode
- Frequency 2.412 – 2.462 GHz, 11 channels
- Output power 20 dBm max

## Included accessories

- RJ-45 Cat5e Ethernet cable
- 2 x WiFi antennas, 2 dBi
- I/O connector plug
- Power connector plug
  - TBL5\*PS: AC adapter - Input 100 – 240 V AC, frequency 47 – 63 Hz, Output 12.0 V, 1.6 A, max 19.2 W. EU, UK, AU and US power socket
  - TBL5\*PS: DC feed cable
  - TBL5i\*: 2 x LTE antennas

## I/O specifications

- 2 x digital inputs, galvanic isolation, current limited to <5mA, Voltage 0 - 32V nom. >12V is interpreted as '1', 0-5V is '0'
- 2 x digital outputs, 24V DC, 50 mA current shared by the outputs and 24V DC out
- 1 x 24V DC out, 50 mA current shared by 24V DC out, output 1 and output 2
- Software Configurable I/O state

## Physical properties

- 110 mm x 58 mm x 127 mm / 4.33" x 2.28" x 5.0" (L x W x H)
- Storage temperature -40 °C ... +70 °C / -40 °F ... +158 °F
- Protection class IP20

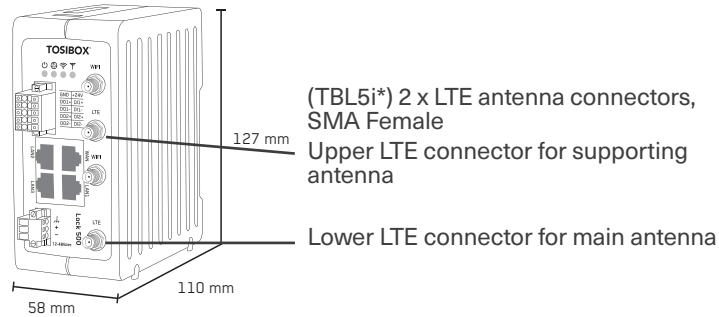
## TBL5\*

- Weight 495 g / 1.09 lbs (net weight article)
- Operating temperature -20 °C ... +60 °C / -4 °F ... +140 °F

## TBL5i\*

- Weight 505 g / 1.11 lbs (net weight article)
- Operating temperature -20 °C ... +60 °C / -4 °F ... +140 °F

# TOSIBOX® Lock 500 Technical Data



1.



\* LAN3 Port can be configured as a Service Port

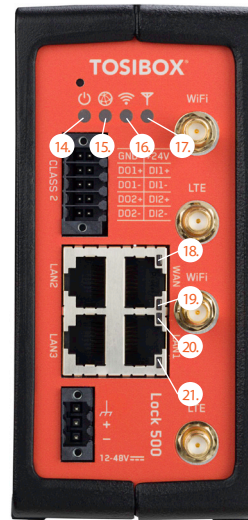
1. SIM card slot
2. USB Port for matching and USB Modem
3. Reset button for Service Port activation only
4. Digital I/O -Connection

**Ethernet Connections:**

5. LAN2 Port
6. WAN Port
7. LAN3 Port\*
8. LAN1 Port

9. Power Connection

10. WiFi Antenna Port 1
11. LTE Antenna Port 2 (Lock 500i only)
12. WiFi Antenna Port 2



**LED indicators:**

14. Power
15. Internet
16. WiFi
17. LTE

**Ethernet Port Leds:**

18. LAN2
19. WAN
20. LAN3
21. LAN1